PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P47539	**FOR FURTHER ACTION**	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/IB 03/01422	International filing date *(day/month/year)* 10.03.2003	Priority date *(day/month/year)* 08.03.2002
International Patent Classification (IPC) or both national classification and IPC A61M16/00		
Applicant KAERYS S.A.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the opinion
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
06.10.2003	30.04.2004
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Borowski, A Telephone No. +49 89 2399-2758

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/IB 03/01422

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-7 as originally filed

Claims, Numbers

1-8 as originally filed

Drawings, Sheets

1-2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).

   ☐ the language of publication of the international application (under Rule 48.3(b)).

   ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   ☐ contained in the international application in written form.

   ☐ filed together with the international application in computer readable form.

   ☐ furnished subsequently to this Authority in written form.

   ☐ furnished subsequently to this Authority in computer readable form.

   ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

   ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐ the description, pages:

   ☐ the claims, Nos.:

   ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1-8
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-8
Industrial applicability (IA)	Yes:	Claims	1-8
	No:	Claims	

2. Citations and explanations

   see separate sheet

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document:

D1: US-A-5 970 975 (ESTES MARK C ET AL) 26 October 1999 (1999-10-26) cited in the application

V.1 The term "**the** increase coefficient K_{RP}" used in claim 2 is unclear and leaves the reader in doubt as to the meaning of the technical features to which it refers, thereby rendering the definition of the subject-matter of said claim unclear (Article 6 PCT). A definition of the term cannot be found in the previous claim, therefore an article "an" instead of "the" should be used.

V.2 The present application does not meet the requirements of Article 33(2) PCT, because the subject-matter of claims 1-8 is not new in the sense of Rule 64(1) PCT.

Document D1 discloses:

An apparatus to assist a patient respiration by delivering air to a patient trough (Column 1, Lines 13-22) a mask (Fig. 1 (22)), comprising:
- a blower (Fig. 1 (14)) to provide the patient with air under a treatment pressure,
- a control unit (Fig. 1 (26)) to adjust the pressure delivered by said blower at the level of said mask,
- a ramp module (Fig. 5 (104)) connected to the control unit in order to provide the control unit with the value of pressure to settle at said mask, so that when said apparatus starts functioning, the pressure progressively rises until the pressure of treatment (Column 22, Lines 26-49),
- a comparator (Column 22, Lines 50-65) connected to the ramp module,
- a means for detecting the patient's breathing parameters (Fig. 5A (106')(107')) and sending them to said comparator, in order in response to said breathing parameters (Column 18, Lines 62-65; Column 22, Lines 50-65), that the comparator is able to determine that an event occurs in patient's breathing and to send the corresponding data to the ramp module which provides the control unit with a value of pressure that will speed up with respect of time, so that the rise of

pressure at patient's mask is accelerated (Column 25, Lines 53-63).

The subject-matter of claim 1 is therefore not new (Article 33(2) PCT).

In his letter dated 1st April 2004 the applicant introduces an argument that claim 1 is novel and inventive over prior art, because a ramp can be modified during the time when the ramp is activated (supported by the description for example on page 2, lines 13-15). This argument cannot be followed, because this feature is not included in claim 1.

V.3 All features of depending claims 2-8 are also not new over the teaching of document D1:
- linear pressure increase (claim 2): Column 22, Lines 15-20; Fig. 8A and 8C;
- maximum or minimum limits of the pressure stored in a memory (claims 3-5): Column 21, Lines 53-60;
- computing airflow (claim 6): Fig. 6 (29)(30);
- detection of anomalies in patient's breathing (claim 7): Column 24, Lines 26-30;
- analysis (comparison) of patient breathing parameters (claim 8); Column 18, Lines 62-65.